

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/595,041	LENZINI, MARTIN JOHN	
	<b>Examiner</b>	<b>Art Unit</b>	
	LEE D. WILSON	3727	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/7/09.
2. ☒ The allowed claim(s) is/are 2-30.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br/>Paper No./Mail Date _____</li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application</li> <li>6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date <u>9/7/09</u> .</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input checked="" type="checkbox"/> Other <u>Revocation of Power of Attorney</u>.</li> </ol> |
|--|---|

/LEE D WILSON/  
Primary Examiner, Art Unit 3727



### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Martin Lenzini on 9/7/09.

The application has been amended as follows:

**2. The present claims have been amended and the Election Restriction has been removed and all claims have been rejoined please see the claims listed below:**

### **THE CLAIMS LISTINGS**

1. (Canceled)
2. (Currently Amended) A device according to claim 4- 27, further including a bypass channel which connects a location between the inlet port and the low pressure region of the venturi to an air exhaust port for venting air to atmosphere, and a mechanism for automatically opening said channel in the event that vacuum in the vacuum chamber falls below a predetermined level.
3. (Original) A device according to claim 2, wherein said mechanism is

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arranged to automatically close said bypass channel when vacuum in the vacuum chamber rises above a predetermined level.

4. (Original) A device according to claim 2, wherein said mechanism comprises a blocking member movable between a blocking position in which it blocks the bypass channel and an unblocking position in which it does not block the bypass channel; said blocking member being urged by a spring force to the unblocking position when vacuum in the vacuum chamber falls below a predetermined level.

5. (Original) A device according to claim 4, wherein the blocking member is connected to or integrally formed with a sealing member which provides a substantially fluid-tight seal between the bypass channel and the vacuum chamber, whereby, when a sufficiently high vacuum is applied in the vacuum chamber the sealing member is urged by atmospheric pressure in a direction to move the blocking member from the unblocking position to the blocking position or to maintain the blocking member in the blocking position against the spring force.

6. (Currently Amended) A device according to claim 4, wherein when the blocking member is in the unblocking position part of ~~it~~ said blocking member projects outside the base member to provide a visible indication that the vacuum level is

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insufficient.

7. (Currently Amended) A device according to claim 4 27, further including a source of pressurized fluid connected to the inlet port and provided with a pressure switch which will trigger a signal in the event that the fluid pressure drops below a predetermined value.

8. (Currently Amended) A device according to claim 4 27, wherein said fluid connection to the inside of the vacuum chamber is via a port in the base member.

9. (Currently Amended) A device according to claim 4 27, wherein the vacuum chamber is provided with at least one internal support that spans the distance between major internal surfaces of the base member and the workpiece support.

10. (Original ) A device according to claim 9, wherein said at least one internal support comprises a plurality of elongate parallel upstands provided on the base member.

11. (Currently Amended) A device according to claim 4 27, wherein said securing means comprises at least one mechanical clamp for securing a workpiece.

12. (Currently Amended) A device according to claim 4 27, wherein said securing means comprises at least one hole in the workpiece support, providing fluid communication

between the inside of the vacuum chamber and the work surface on top of the workpiece support to which a workpiece is to be secured.

13. (Original) A device according to claim 12, wherein at least one hole is provided in the base member, providing fluid communication between the inside of the

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vacuum chamber and an outside surface of the base member, to enable vacuum hold-down of

the base member on a supporting surface.

14. (Currently Amended) A device according to claim 4 27, wherein the venturi is disposed substantially within the base member.

15. (Currently Amended) A device according to claim 4 27, wherein the base member is part of a machine table.

16. (Canceled)

17. (Currently Amended) A- The vacuum hold down system according to ~~any~~ claim 46 28, wherein said securing means comprises at least one mechanical clamp for securing a workpiece.

18. (Currently Amended) A- The vacuum hold down system according to claim 46- 28, wherein each of said workpiece supports is of substantially identical ~~construction~~.

19. (Currently Amended) A- The vacuum hold down system according to claim 46- 28, wherein at least ~~some~~ one of said workpiece supports ~~are of a different construction from each other~~ includes a handle.

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20. (Currently Amended) A- The vacuum hold down system according to claim 46- 28, wherein the venturi is disposed substantially entirely within the area of the base member.

21. (Currently Amended) A- The vacuum hold down system according to claim 46- 28, wherein at least one hole is provided in the base member, providing fluid communication between the inside of the vacuum chamber and an outside surface of the base member, ~~to enable vacuum hold-down of the base member on a supporting surface.~~

22. (Currently Amended) A- The vacuum hold down system according to claim 46- 28, further including a bypass channel which connects a location between the inlet port and the low pressure region of the venturi to an air exhaust port for venting air to atmosphere, and a mechanism for automatically opening said channel in the event that vacuum in the vacuum chamber falls below a predetermined level.

23. (Currently Amended) A- The vacuum hold down system according to claim 22, wherein said mechanism comprises a blocking member movable between a blocking position in which it- said blocking member blocks the bypass channel and an unblocking position in which it- said blocking member does not block the bypass channel; said blocking member being urged by spring means to the unblocking position when vacuum in the vacuum chamber falls below a predetermined level.

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24. (Currently Amended) A- The vacuum hold down system according to claim 23, wherein the blocking member is connected to or integrally formed with a sealing member which provides a substantially fluid-tight seal between the bypass channel and the vacuum chamber, whereby when a sufficiently high vacuum is applied in the vacuum chamber the sealing member is urged by atmospheric pressure in a direction to move the blocking member from the unblocking position to the blocking position or to maintain the blocking member in the blocking position against the spring force.

25. (Currently Amended) A- The vacuum hold down system according to claim 23, wherein when the blocking member is in the unblocking position part of it said blocking member projects outside the base member to provide a visible indication that the vacuum level is insufficient.

26. (Currently Amended) A- The vacuum hold down system according to claim 16- ~~28~~, further including a source of pressurised fluid connected to the inlet port and provided with a pressure switch which will trigger a signal in the event that the fluid pressure drops below a predetermined value.

27. (New) A vacuum hold-down device comprising



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a base member having a vacuum chamber including a venturi having an inlet port for connection to a source of pressurized fluid, an outlet for fluid from the venturi, and a fluid connection from a low pressure region of the venturi to the inside the vacuum chamber; and

a separate workpiece support with a securing means which is removably attached to the base in order to maintain a peripheral seal thereon.

28. (New) A vacuum hold-down device system comprising

a base member having a vacuum chamber including a venturi having an inlet port for connection to a source of pressurized fluid, an outlet for fluid from the venturi, and a fluid connection from a low pressure region of the venturi to the inside the vacuum chamber; and

a plurality of workpiece supports with a securing means which are interchangeably removably attached to the base in order to maintain a peripheral seal thereon.

29. (New) The vacuum hold down system according to claim 28, wherein at least one of said workpiece supports includes an o-ring seal.

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30. (New) The vacuum hold down system according to claim 29, wherein at least one of said workpiece supports with said an o-ring seal further comprising a locating hole wherein base plate further comprises corresponding location pins.

### **REASONS FOR ALLOWANCE**

3. The following is an examiner's statement of reasons for allowance:
  - a. The invention is neither anticipated nor rendered obvious by the prior art because the device recites a vacuum plate with a detachable/attachable top plate having a clamping means in combination with the other claimed limitations.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE D. WILSON whose telephone number is 571-272-4499. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MONICA CARTER can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ldw

/LEE D WILSON/  
Primary Examiner, Art Unit 3727

September 7, 2009